Docket No.: 067339-0033 **PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	Customer Number: 20277
Siu-leong IU, et al.	:	Confirmation Number: 3640
Application No.: 09/763,917	:	Group Art Unit: 3685
Filed: July 03, 2001	:	Examiner: Winter, John M

For: WATERMARKING SYSTEM AND METHODOLOGY FOR DIGITAL MULTIMEDIA CONTENT

REPLY BRIEF

Mail Stop Reply Brief
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Reply Brief is submitted in response to the Examiner's Answer mailed June 13, 2011.

ARGUMENTS

Appellants submit that each rejection imposed by the Examiner is not viable and solicits the Honorable Board to reverse each of the rejections for the reasons set forth in the Appeal Brief submitted March 18, 2011 and for the reasons set forth herein. Appellants will show that the Examiner has adopted a legally erroneous approach to the ultimate legal conclusion of obviousness under 35 U.S.C. §103 and 112.

1. The § 112 Rejection of Claims 19-30 And 62-77.

It was asserted in the final Office Action that the phrase "not readily visible to a viewer" does not quantify an amount of warping and is therefore indefinite. In the Examiner's Answer, the Examiner responded, on page 11, that the claim language "will be distorted" and "can be seen by the viewer" are not directed towards positive claim limitations since the claimed action take place at an arbitrary point in the future, and are merely a "description of the intended result of the claimed process and as such does not have patentable merit".

The Examiner holds the same argument for the limitation of claims 62-63 "wherein audio or video information produced by combining multiple audio or video data streams corresponding to said information, from different playback units, is distorted and the distortion of the produced audio information can be heard by a listener of the produced audio information or the distortion of the produced video information can be seen by a viewer of the produced video information, and said video information comprises a video image embedded in a video data stream, and said video image is distorted during playback by a playback unit in accord with the predetermined mapping function by an amount not readily visible to the viewer, but such that a video image produced by combining multiple video data streams reproduced by multiple different playback

units is distorted and the distortion can be seen by the viewer, wherein said mapping function changes with time during playback of the video image by a playback unit".

Appellants respectfully disagree with the Examiner. The above-mentioned phrases clarify the "means for imparting a prescribed transformation to the video image for warping the video image". They clarify the "manner and amount" of warping, (not readily visible to a viewer, such that a composite video image produced by multiple video playback units will be distorted and the distortion of the composite video image can be seen by the viewer).

As is stated in MPEP 2173.02, definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made. The specification makes it abundantly clear how the means for imparting a prescribed transformation will work.

The Examiner does not appear to have analyzed the claim in this manner, but rather, suggests that the clarifying terminology adds nothing to the patentability of the claim. However, as the application is directed toward a watermarking system that is designed to surreptitiously monitor and foil pirating efforts, one skilled in the art at the time of the invention would readily understand and interpret clearly the language set forth in the claim. As such, Appellants respectfully request that the § 112 rejection of claims 19-30 and 62-77 be withdrawn.

2. The § 103 Rejection of Claims 19-30 And 62-77.

In the Appeal Brief, Appellants clearly demonstrated the failure of the cited prior art to disclose the limitations of the pending claims. The Appeal Brief discussed how Rhoads does not disclose a means for imparting a prescribed transformation in col. 28, lines 1-28 because the

passage not concerned with the claimed warping of a *video* image, but rather an audio image. Further, this audio image is a way of imparting an industry standardized noise signal whose precise length would be "derived from considerations such as audibility, quasi-white noise status, seamless, repeatability, simplicity of recognition processing, and speed with which a copyright marking determination can be made". Thus, Rhoads is directed to making a signal that is easy to find and readily producible, exactly the opposite ideal as that of the present application. The Examiner's argument that the claim language does not add patentability to the claim has already been shown to be inadequate as discussed above.

It was further shown that Chaum fails to teach a distortion such that a composite video image produced by multiple video playback units will be distorted and the distortion of the composite video image can be seen by the viewer in col. 8, lines 47 to col. 9, line 9 because the recited passage of Chaum discloses splitting of a recording into multiple parts, not distorting a video image. The Examiner has no reply to this argument.

In addition, the Examiner admitted that Rhoads does not disclose or suggest the feature of claim 19 of "a decoder for decoding the encoded data stream" but relies on Saito at column 8, lines 15-18, in an attempt to overcome this deficiency. However, the citation of Saito merely describes a sub-system for graphics displaying, not "a decoder for decoding the encoded data stream". In the Examiner's Answer, the Examiner asserts that the decoder is disclosed on page 7, lines 1-7. However, the decoder described in this passage discusses an analog signal, not a digital data stream of the present disclosure.

Additionally, Appellants showed that there is no motivation to combine these references. The Examiner agreed that references cannot be arbitrarily combined, but stated that the modification need not be expressly articulated. The Examiner further suggests that because the

references are directed towards preventing unauthorized usage of media, the combination is valid. However, the Examiner did not address the arguments set forth in the Appeal Brief, specifically that the motivation cited by the Examiner of "to enforce digital rights management systems" has been taken out of context, and that Chaum does not discuss digital rights management systems or pertains to multiple audio or video data streams. Chaum is directed towards the prevention of motion picture copy protection via the use of playback devices, a film and movie projector. Since the differences between projectors and the techniques in Rhoads for embedding auxiliary data in a video signal and subsequently attempting to extract that data to authenticate the video signal are substantial, one of ordinary skill in the art would never consider applying the standard movie and film projectors discussed in Chaum to the teachings of Rhoads and Saito, to practice the invention of claim 1. Hence, the combination of Rhoads, Chaum and Saito is improper.

Turning to claims 62-77, the above arguments for combination of prior art apply. In addition, Appellants argued that Chaum fails to cure the deficiencies of Rhoads because it fails to disclose or suggest "[s]uch that audio or video information produced by combining multiple audio or video data streams corresponding to said information, from different playback units will be perceptibly distorted." Further, as Chaum discloses a system to prevent surreptitious in-theater filming of a projected film by means of a video camera synchronized to the framing rate of the film, Chaum fails to disclose or suggest "[s]uch that audio or video information produced by combining multiple audio or video data streams corresponding to said information, from different playback units will be perceptibly distorted." On the contrary, the playback devices in Chaum, a film and movie projector, yield non-perceptibly distorted audio and video.

In view of the above arguments, Appellants respectfully submit that the Examiner did not establish a *prima facie* basis to deny patentability to the claimed invention. Appellants, therefore, respectfully solicit the Honorable Board to reverse the Examiner's rejection of claims 19-30 and 62-77 under 35 U.S.C. § 103 for obviousness predicated upon Rhoads, Chaum and Saito.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Nathaniel D. McQueen
Registration No. 53,308

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 NDM:MWE
Facsimile: 202.756.8087
Date: August 15, 2011

Please recognize our Customer No. 20277 as our correspondence address.